

HOW TO... Create a vector drawing

If you want to create precise drawings with accurate shading, you need a vector-drawing program. Adam Banks explains how to make a cup of coffee with DrawPlus 4

Image-editing software is great for everything from retouching photos to creating your own masterpiece. It's not as effective when you need clean, simple graphics that can be displayed and printed at any size, a common requirement for business graphics and corporate identity. The right tool for this job is vector-drawing software.

Many people are put off vector drawing by bezier curves. Mastering these is essential for professional designers; we showed you how to draw with bezier curves in *Shopper* October 2005 and a copy of that 'How to...' is included on the cover disc. However, it is possible to create effective graphics without using beziers or any other advanced features. In this article, we show you how to draw a logo using DrawPlus 4, which is free to download from www.freerisef software.com.

Even though your picture will be simplified and stylised, it should convey the way an object looks, not a diagram or symbolic representation of it. Have the object, or a photo of it, in front of you. View it from a three-quarter angle, not straight on.

1 Run DrawPlus 4 and click on Create a Drawing. Next, Finish. Zoom in a bit by clicking three times on the magnifying glass with a plus sign at the bottom left. From the toolbox on the left, click on the fifth icon to pop out a choice of QuickShapes. We're going to draw a coffee cup, so our main shape will be a circle. Choose the second icon, QuickEllipse. In the Fill tab on the right, set the colour to Burgundy. In the Line tab, choose None from the first pop-up menu. Click and drag on your blank page to draw

the shape. Hold down the Ctrl key to make a perfect circle.

2 A key technique is to use one shape to mask another. To create the rim of the coffee cup, as if seen from slightly above, use a second circle copied from the one you just drew. Holding down the Ctrl key, click on the circle and drag it slightly up towards the top of the page. The cursor shows a Copy symbol. Release the mouse button to create the copy, almost exactly on top of the original, then change it to White using the Fill tab. Drag the square handle at the bottom centre to squash the circle.

3 To draw the coffee inside the cup, think creatively. If you click the QuickShapes icon in the toolbox again, you'll see that one of the options is a spiral. Choose this, then click and drag over the top of your squashed circle. It doesn't matter for now if the size and position aren't exactly right. Above and below your spiral are its QuickShape 'nodes'. Drag the top one all the way to the left for a single spiral, then drag the bottom one a little way to reduce the number of turns.

4 To position the spiral, switch back from the Node tool to the main Pointer tool at the top of the toolbox. Resize the shape by dragging its handles and move it around either by dragging or by nudging it with the cursor keys. Position it slightly lower than the white ellipse, because the coffee would be below the rim. Next, draw the cup's handle. From the QuickShapes,

choose QuickDonut. Draw this on the side of the cup, then adjust its nodes. Drag the left one to the top so there's no break in the ring, then move the top one to adjust the hole in the middle.

5 To give the handle volume, add a highlight. Using the Pointer, hold down the Ctrl key while you drag (in other words, Ctrl-drag) the ring to copy it, then fill it White, as in Step 2. Drag its bottom-left handle to make it slightly smaller and off-centre. Then Ctrl-drag it downwards a little to make another copy and fill this with the colour Burgundy. The second copy masks the first, leaving a half-moon highlight. Reposition the shapes as necessary.

6 Ctrl-drag your first circle downwards to make the saucer and drag its side handles to enlarge it. To convey the shape of the saucer, add a highlight using two copies, as for the cup handle. You'll need to make your shapes overlap in the right order: to put the saucer behind the cup, for example, use Arrange, Order Objects, Back One. Add the base of the saucer using smaller White and Burgundy ellipses. When your drawing is finished, press Ctrl-A to select all the shapes, then Ctrl-G to group them. You can now resize or reposition the whole drawing using the Pointer. The vector shapes will look perfectly smooth at any size. If you want to compare your image to ours, a copy of our artwork in .dpp format is on the cover disc. 

EXPERT TIP

Save your drawing as a DrawPlus .dpp file for future editing, and export it as a JPEG for use in other software.

